

***In the Claims***

The status of claims in the case is as follows:

1    1. [Currently amended] A method for monitoring a computer  
2    application software system by reading log records written  
3    by said software system to determine performance of said  
4    software system relative to response time to end users,  
5    comprising:

6  
7    adjustably tuning performance evaluation bias by a  
8    computer software monitoring system between processor  
9    and memory consumption; [[and]]

10   responsive to said bias, monitoring performance of said  
11   computer application software system with respect to  
12   transaction time parameters including said response  
13   time to end users; and

14   receiving from a user a first tuning parameter for  
15   allocating memory for said monitoring performance and a  
16   second tuning parameter for specifying time out for in-  
17   flight units of work.

1    2-3. [Canceled]

1    4. [Currently amended] The method of claim 2 claim 1,  
2    further comprising:

3    initializing said memory with an in-flight transactions  
4    vector table for anchoring synonym chains of in-flight  
5    transaction cells;

6                    accumulating time statistics for in-flight transactions  
7                    in said in-flight transaction cells;

8                    initializing said memory with a completed transactions  
9                    table for storing time statistics for completed  
10                   transactions;

11                   receiving from said computer ~~application software~~  
12                   system a transaction log record for a unit of work;

13                   hashing said first transaction log record to select  
14                   from said vector table an anchor to an in-flight  
15                   transaction cells chain corresponding to said unit of  
16                   work;

17                   searching said in-flight transaction cells chain for  
18                   said unit of work;

19                   responsive to finding said unit of work in said in-  
20                   flight transaction cells chain, capturing to said in-  
21                   flight transaction cell timing statistics from said  
22                   transaction log record;

23                   responsive to not finding said unit of work in said in-  
24                   flight transaction cells chain, chaining a new in-  
25                   flight transaction cell to said chain and capturing to  
26                   said new in-flight transaction cell timing statistics  
27                   from said transaction log record; and

28                   determining if said transaction log record completes a  
29                   transaction and, if so, updating said completed  
30                   transactions table with timing statistics for said

31 transaction and removing said in-flight transaction  
32 cell from said in-flight transaction cells chain.

1 5. [Currently amended] The method of ~~claim 3~~ claim 1,  
2 further comprising

3 initializing said memory with an in-flight transactions  
4 vector table for anchoring synonym chains of in-flight  
5 transaction cells;

6 accumulating time statistics for in-flight transactions  
7 in said in-flight transaction cells;

8 initializing said memory with a completed transactions  
9 table for storing time statistics for completed  
10 transactions;

/

11 receiving from said computer application software  
12 system a transaction log record for a unit of work;

13 hashing said first transaction log record to select  
14 from said vector table an anchor to an in-flight  
15 transaction cells chain corresponding to said unit of  
16 work;

17 searching said in-flight transaction cells chain for  
18 said unit of work;

19 responsive to finding said unit of work in said in-  
20 flight transaction cells chain, capturing to said in-  
21 flight transaction cell timing statistics from said  
22 transaction log record;

23           responsive to not finding said unit of work in said in-  
24           flight transaction cells chain, chaining a new in-  
25           flight transaction cell to said chain and capturing to  
26           said new in-flight transaction cell timing statistics  
27           from said transaction log record;

28           determining if said transaction log record completes a  
29           transaction and, if so, updating said completed  
30           transactions table with timing statistics for said  
31           transaction and removing said in-flight transaction  
32           cell from said in-flight transaction cells chain; and

33           determining responsive to said second tuning parameter  
34           if a selected unit of work being accumulated in a  
35           selected in-flight transaction cell has timed out, and  
36           if so removing from said selected in-flight transaction  
37           cell from said in-flight transaction cell chain and  
38           selectively updating said completed transactions table  
39           with timing statistics for said selected unit of work.

·1       6. [Currently amended] A system for monitoring a computer  
2           application software system by reading log records written  
3           by said software system to determine performance of said  
4           software system relative to response time to end users,  
5           comprising:

6           a first user actuated tuning knob for allocating space  
7           in memory for performance monitoring;

8           a second user actuated tuning knob for specifying  
9           time out value for in-flight units of work; and

10           a transaction monitor responsive to said first and  
11           second user actuated tuning knobs for accumulating, in  
12           synonym chain cells in said space, timing statistics  
13           for a plurality of said in-flight units of work.

1       7. [Original] The system of claim 6, further comprising:

2           said memory including an in-flight transactions vector  
3           table for anchoring synonym chains of in-flight  
4           transaction cells;

5           said in-flight transaction cells for accumulating time  
6           statistics for in-flight transactions;

7           said memory including a completed transactions table  
8           for storing time statistics for completed transactions;

9           a monitor for receiving from said computer ~~application~~  
10           software system a transaction log record for a unit of  
11           work;

12           said monitor hashing said first transaction log record  
13           to select from said vector table an anchor to an in-  
14           flight transaction cells chain corresponding to said  
15           unit of work;

16           said monitor for searching said in-flight transaction  
17           cells chain for said unit of work;

18           said monitor further responsive to finding said unit of  
19           work in said in-flight transaction cells chain for  
20           capturing to said in-flight transaction cell timing

21 statistics from said transaction log record;

22 said monitor further responsive to not finding said  
23 unit of work in said in-flight transaction cells chain  
24 for chaining a new in-flight transaction cell to said  
25 chain and capturing to said new in-flight transaction  
26 cell timing statistics from said transaction log  
27 record;

28 said monitor further for determining if said  
29 transaction log record completes a transaction and, if  
30 so, updating said completed transactions table with  
31 timing statistics for said transaction and removing  
32 said in-flight transaction cell from said in-flight  
33 transaction cells chain; and

34 said monitor further for determining responsive to said  
35 second tuning knob if a selected unit of work being  
36 accumulated in a selected in-flight transaction cell  
37 has timed out, and if so removing from said selected  
38 in-flight transaction cell from said in-flight  
39 transaction cell chain and selectively updating said  
40 completed transactions table with timing statistics for  
41 said selected unit of work.

1 8. [Currently amended] A program storage device readable  
2 by a machine, tangibly embodying a program of instructions  
3 executable by a machine to perform method steps for  
4 monitoring a computer application software system by reading  
5 log records written by said software system to determine  
6 performance of said software system relative to response  
7 time to end users, said method comprising:

8           adjustably tuning performance evaluation bias between  
9           processor and memory consumption; [[and]]

10          responsive to said bias, monitoring performance of said  
11        computer application software system with respect to  
12        transaction time parameters; and

13        receiving from a user a first tuning parameter for  
14        allocating memory for said monitoring performance and a  
15        second tuning parameter for specifying time out for in-  
16        flight units of work.

1       9-10.        [Canceled]

1       11.   [Currently amended]   The program storage device of  
2       ~~claim 9~~ claim 8, said method further comprising:

3           initializing said memory with an in-flight transactions  
4           vector table for anchoring synonym chains of in-flight  
5           transaction cells;

6           accumulating time statistics for in-flight transactions  
7           in said in-flight transaction cells;

8           initializing said memory with a completed transactions  
9           table for storing time statistics for completed  
10          transactions;

11          receiving from said computer application software  
12        system a transaction log record for a unit of work;

13          hashing said first transaction log record to select

14                   from said vector table an anchor to an in-flight  
15                   transaction cells chain corresponding to said unit of  
16                   work;

17                   searching said in-flight transaction cells chain for  
18                   said unit of work;

19                   responsive to finding said unit of work in said in-  
20                   flight transaction cells chain, capturing to said in-  
21                   flight transaction cell timing statistics from said  
22                   transaction log record;

23                   responsive to not finding said unit of work in said in-  
24                   flight transaction cells chain, chaining a new in-  
25                   flight transaction cell to said chain and capturing to  
26                   said new in-flight transaction cell timing statistics  
27                   from said transaction log record; and

28                   determining if said transaction log record completes a  
29                   transaction and, if so, updating said completed  
30                   transactions table with timing statistics for said  
31                   transaction and removing said in-flight transaction  
32                   cell from said in-flight transaction cells chain.

1       12. [Currently amended] The program storage device of  
2       ~~claim 10~~ claim 8, said method further comprising

3                   initializing said memory with an in-flight transactions  
4                   vector table for anchoring synonym chains of in-flight  
5                   transaction cells;

6                   accumulating time statistics for in-flight transactions

7           in said in-flight transaction cells;

8           initializing said memory with a completed transactions  
9           table for storing time statistics for completed  
10           transactions;

11           receiving from said computer ~~application software~~  
12           system a transaction log record for a unit of work;

13           hashing said first transaction log record to select  
14           from said vector table an anchor to an in-flight  
15           transaction cells chain corresponding to said unit of  
16           work;

17           searching said in-flight transaction cells chain for  
18           said unit of work;

19           responsive to finding said unit of work in said in-  
20           flight transaction cells chain, capturing to said in-  
21           flight transaction cell timing statistics from said  
22           transaction log record;

23           responsive to not finding said unit of work in said in-  
24           flight transaction cells chain, chaining a new in-  
25           flight transaction cell to said chain and capturing to  
26           said new in-flight transaction cell timing statistics  
27           from said transaction log record;

28           determining if said transaction log record completes a  
29           transaction and, if so, updating said completed  
30           transactions table with timing statistics for said  
31           transaction and removing said in-flight transaction

32                   cell from said in-flight transaction cells chain; and  
33                   determining responsive to said second tuning parameter  
34                   if a selected unit of work being accumulated in a  
35                   selected in-flight transaction cell has timed out, and  
36                   if so removing from said selected in-flight transaction  
37                   cell from said in-flight transaction cell chain and  
38                   selectively updating said completed transactions table  
39                   with timing statistics for said selected unit of work.

1           13. [Currently amended] A computer program product storage  
2           device for storing programming instructions for monitoring a  
3           computer application software system by reading log records  
4           written by said software system to determine performance of  
5           said software system relative to response time to end users  
6           according to the method comprising:

7                   first program instructions for adjustably tuning  
8                   performance evaluation bias by a software system  
9                   monitor between processor and memory consumption; and  
10                  second program instructions, responsive to said bias,  
11                  for monitoring performance of said computer application  
12                  software system with respect to transaction time  
13                  parameters; and wherein  
14                  said first and second program instructions are recorded  
                  on said storage device.